

**Type of article: Review**

### **Antidiabetic bioactive compounds from plants**

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#### **Abstract:**

Diabetes mellitus is a common and widespread disease that affects citizens in developed and developing countries. Diabetes is a disease that combines inherited and environmental causes that cause high blood sugar levels known as hyperglycemia. Phytotherapy has achieved good clinical practice and shows a bright future in the treatment of diabetes mellitus. The purpose of this review was to provide information about the most useful antidiabetic compounds from plants available through numerous literature sources from various databases. Many researches confirmed the benefits of phytoconstituants with antidiabetic effects in the management of diabetes mellitus. Thus, drugs from plants may control all pathological aspects of diabetes, either by increasing insulin production by the pancreas, helping to lower the body's insulin requirements, or reducing gluconeogenesis in the liver. The effect of these antidiabetic plants has been tested in vivo and in vitro on rats, mice, rabbits and dogs. Very few have been tested on humans for their effectiveness.

**Keywords :** Diabetesmellitus ; phytochemicals ; glucose ;  $\beta$ -cells, insulin secretion ;Metabolicdisorder.